

Amendments to the Claims

The current listing of the claims replaces all previous amendments and listings of the claims.

1. (Currently Amended) A method for coupling plastic optical fibers, comprising:
providing a holder comprising a groove including openings having inclined portion at opposite ends of the holder configured to hold the plastic optical fibers in a longitudinal direction;
abutting opposed end faces of the plastic optical fibers together; and
removably disposing a first portion of a clip on a face of the holder and a second portion of the clip on a face of a cover to apply a lateral pressure to the plastic optical fibers therebetween to sandwich the plastic optical fibers; and
introducing ends of the plastic optical fibers into the groove in the holder through the inclined portions when the clip is disposed to secure the holder against the cover.
2. (Previously Presented) The method according to claim 1, wherein the groove is configured to encompass a cylindrical space occupying at least 50% of an entire outer circumference of at least one of the plastic optical fibers.
3. (Previously Presented) The method according to claim 1, wherein at least one of the plastic optical fibers comprises fluororesin.
4. (Previously Presented) The method according to claim 1, further comprising:
interposing a refractive index matching agent between the opposed end faces of the plastic optical fibers.
5. (Canceled)
6. (Currently Amended) The method according to claim [[5]] 1, wherein the groove is configured to encompass a cylindrical space occupying at least 50% of an entire outer circumference of at least one of the plastic optical fibers.

7. (Currently Amended) The method according to claim [[5]] 1, wherein at least one of the plastic optical fibers comprises fluororesin.

8. (Currently Amended) The method according to claim [[5]] 1, further comprising: interposing a refractive index matching agent between the opposed end faces of the plastic optical fibers.

9. (Currently Amended) A coupling unit comprising:
a holder comprising a groove including openings having inclined portion at opposite ends of the holder configured to hold plastic optical fibers in a longitudinal direction; and
a clip including first and second portions, the clip configured to be removably disposed to contact a face of a cover with the first portion and a face of the holder with the second portion to apply a lateral pressure to the plastic optical fibers therebetween to sandwich the plastic optical fibers, and the clip configured to permit introduction of ends of the plastic optical fibers into the groove in the holder through the inclined portions when the clip is disposed to secure the holder against the cover.

10. (Previously Presented) The unit according to claim 9, wherein the groove is configured to encompass a cylindrical space occupying at least 50% of an entire outer circumference of at least one of the plastic optical fibers.

11. (Previously Presented) The unit according to claim 9, further comprising: plastic optical fibers, wherein at least one of the plastic optical fibers comprises fluororesin.

12. (Previously Presented) The unit according to claim 9, further comprising: a refractive index matching agent disposed in the groove.

13. (Previously Presented) The unit according to claim 9, wherein the groove comprises openings at opposite ends of the holder, and the openings have inclined portions.

14. (Previously Presented) The unit according to claim 13, wherein the groove is configured to encompass a cylindrical space occupying at least 50% of an entire outer circumference of at least one of the plastic optical fibers.

15. (Previously Presented) The unit according to claim 13, further comprising: plastic optical fibers, wherein at least one of the plastic optical fibers comprises fluororesin.

16. (Previously Presented) The unit according to claim 13, further comprising: a refractive index matching agent disposed in the groove.

17. (Currently Amended) A coupling unit, comprising:
a holder comprising a groove including openings having inclined portion at opposite ends of the holder configured to receive optical fibers;
a cover configured to cover the groove of the holder; and
a removable clip comprising first and second portions configured to urge the holder and the cover together, the first portion configured to contact a surface of the holder and the second portion configured to contact a surface of the cover, the clip configured to permit introduction of ends of the optical fibers into the groove in the holder through the inclined portions when the clip is disposed to secure the holder against the cover.

18. (Previously Presented) The coupling unit according to claim 17, wherein the clip further comprises at least one of a protrusion and a void configured to cooperate with a corresponding void or protrusion of the holder or the cover.

19. (Previously Presented) The coupling unit according to claim 17, wherein the first and second portions of the clip are configured to contact opposing faces of the holder and the cover.

20. (Previously Presented) The coupling unit according to claim 17, wherein at least one of the opposing faces of the holder and the cover comprises a protrusion or a void configured to cooperate with a corresponding void or protrusion of the clip.

21. (New) The method according to claim 1, wherein the holder comprises a material having thermal expansion properties similar to thermal expansion properties of a material of the plastic optical fibers.

22. (New) The coupling unit according to claim 9, wherein the holder comprises a material having thermal expansion properties similar to thermal expansion properties of a material of the plastic optical fibers.

23. (New) The coupling unit according to claim 17, wherein the holder comprises a material having thermal expansion properties similar to thermal expansion properties of a material of the optical fibers.

24. (New) The coupling unit according to claim 17, wherein the holder comprises ridges at four edges of an upper surface in which the groove is disposed, and the cover is disposed on the upper surface of the holder within a perimeter defined by the ridges.